#### 107TH CONGRESS 1ST SESSION

# H. R. 2323

To authorize Department of Energy programs to develop and implement an accelerated research and development program for advanced clean coal technologies for use in coal-based electricity generating facilities and to amend the Internal Revenue Code of 1986 to provide financial incentives to encourage new construction and the retrofitting, repowering, or replacement of coal-based electricity generating facilities to protect the environment and improve efficiency and encourage the early commercial application of advanced clean coal technologies, so as to allow coal to help meet the growing need to the United States for the generation of reliable and affordable electricity.

#### IN THE HOUSE OF REPRESENTATIVES

June 26, 2001

Mr. Whitfield (for himself, Mr. Boucher, Mr. Shimkus, Mr. Mollohan, Mrs. Capito, Mr. Costello, Mr. Lewis of Kentucky, Mr. Phelps, Ms. Hart, Mr. Strickland, Mr. Doyle, Mr. Tiberi, and Mr. Rogers of Kentucky) introduced the following bill; which was referred to the Committee on Ways and Means, and in addition to the Committee on Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

### A BILL

To authorize Department of Energy programs to develop and implement an accelerated research and development program for advanced clean coal technologies for use in coal-based electricity generating facilities and to amend the Internal Revenue Code of 1986 to provide financial incentives to encourage new construction and the retrofitting, repowering, or replacement of coal-based electricity generating facilities to protect the environment and improve efficiency and encourage the early commercial application of advanced clean coal technologies, so as to allow coal to help meet the growing need to the United States for the generation of reliable and affordable electricity.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "National Electricity and Environmental Technology
- 6 Act".
- 7 (b) Table of Contents of Contents of
- 8 this Act is as follows:
  - Sec. 1. Short title; table of contents.
  - Sec. 2. Findings.

### TITLE I—TECHNOLOGY ASSESSMENT AND RESEARCH AND DEVELOPMENT

- Sec. 101. Definitions.
- Sec. 102. Technology assessment.
- Sec. 103. Study.
- Sec. 104. Technology research and development program.
- Sec. 105. Authorization of appropriations.
- Sec. 106. Clean Coal Power Commercial Applications Initiative.
- Sec. 107. Financial assistance.

# TITLE II—CREDIT FOR EMISSION REDUCTIONS AND EFFICIENCY IMPROVEMENTS IN EXISTING COAL-BASED ELECTRICITY GENERATION FACILITIES

- Sec. 201. Credit for investment in qualifying clean coal technology.
- Sec. 202. Credit for production from a qualifying clean coal technology unit.

## TITLE III—INCENTIVES FOR EARLY COMMERCIAL APPLICATIONS OF ADVANCED CLEAN COAL TECHNOLOGIES

- Sec. 301. Credit for investment in qualifying advanced clean coal technology.
- Sec. 302. Credit for production from qualifying advanced clean coal technology.
- Sec. 303. Risk pool for qualifying advanced clean coal technology.

# TITLE IV—TREATMENT OF CERTAIN GOVERNMENTAL AND OTHER ENTITIES

Sec. 401. Credits for certain organizations and governmental units.

1	SEC. 2. FINDINGS.
2	Congress finds that—
3	(1) reliable, affordable, increasingly clean elec-
4	tricity will continue to power the growing United
5	States economy;
6	(2) an increasing use of electrotechnologies, the
7	desire for continuous environmental improvement, a
8	more competitive electricity market, and concerns
9	about rising energy prices add importance to the
10	need for reliable, affordable, increasingly clean elec-
11	tricity;
12	(3) coal, which, as of the date of enactment of
13	this Act, accounts for more than ½ of all electricity
14	generated in the United States, is the most abun-
15	dant fossil energy resource of the United States;
16	(4) coal comprises more than 85 percent of all
17	fossil resources in the United States and exists in
18	quantities sufficient to supply the United States for
19	250 years at current usage rates;
20	(5) investments in electricity generating facility
21	emissions control technology over the past 30 years

- even as coal use for electricity generation has nearly
  tripled;
- 3 (6) continuous improvement in efficiency and 4 environmental performance from electricity gener-5 ating facilities would allow continued use of coal and 6 preserve less abundant energy resources for other 7 energy uses;
- 8 (7) new technologies for converting coal into 9 electricity can effectively eliminate health-threat-10 ening emissions and improve efficiency by as much 11 as 50 percent, but initial commercial deployment of 12 new coal generation technologies entails significant 13 risk that generators may be unable to accept in a 14 newly competitive electricity market; and
  - (8) continued environmental improvement in coal-based generation through continued research, development, and demonstration toward an ultimate goal of near-zero emissions is important and desirable.

#### 20 TITLE I—TECHNOLOGY ASSESS-

### 21 **MENT AND RESEARCH AND**

### 22 **DEVELOPMENT**

- 23 SEC. 101. DEFINITIONS.
- 24 In this title:

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1	(1) Cost and Performance Goals.—The
2	term "cost and performance goals" means the cost
3	and performance goals established under section
4	102.
5	(2) Secretary.—The term "Secretary" means
6	the Secretary of Energy.
7	SEC. 102. TECHNOLOGY ASSESSMENT.
8	(a) In General.—The Secretary shall perform an
9	assessment that establishes cost and performance goals
10	with respect to technologies that would permit the contin-
11	ued cost-competitive use of coal for electricity generation,
12	as chemical feedstocks, and as transportation fuel in 2007,
13	2015, and 2020.
14	(b) Consultation.—In establishing the cost and
15	performance goals, the Secretary shall consult with rep-
16	resentatives of—
17	(1) the United States coal industry;
18	(2) State coal development agencies;
19	(3) the electric utility industry;
20	(4) railroads and other transportation indus-
21	tries;
22	(5) manufacturers of equipment using advanced
23	coal technologies;
24	(6) organizations representing workers;
25	(7) organizations formed to—

1	(A) promote the use of coal;
2	(B) further the goals of environmental pro-
3	tection; and
4	(C) promote the development and use of
5	advanced coal technologies; and
6	(8) other appropriate Federal and State agen-
7	cies.
8	(c) Timing.—The Secretary shall—
9	(1) not later than 120 days after the date of
10	enactment of this Act, issue a set of draft cost and
11	performance goals for public comment; and
12	(2) not later than 180 days after the date of
13	enactment of this Act, after taking into consider-
14	ation any public comments received, submit to Con-
15	gress the final cost and performance goals.
16	SEC. 103. STUDY.
17	(a) In General.—Not later than 1 year after the
18	date of enactment of this Act, and once every 2 years
19	thereafter through 2016, the Secretary, in cooperation
20	with the Secretary of the Interior and the Administrator
21	of the Environmental Protection Agency, shall transmit to
22	the Congress a report containing the results of a study
23	to

- 1 (1) identify technologies that, by themselves or 2 in combination with other technologies, may be capa-3 ble of achieving the cost and performance goals;
  - (2) assess the costs that would be incurred by, and the period of time that would be required for, the development and demonstration of technologies that, by themselves or in combination with other technologies, contribute to the achievement of the cost and performance goals;
  - (3) develop recommendations for technology development programs, which the Department of Energy could carry out in cooperation with industry, to develop and demonstrate technologies that, by themselves or in combination with other technologies, achieve the cost and performance goals; and
  - (4) develop recommendations for additional authorities required to achieve the cost and performance goals.
- 19 (b) EXPERT ADVICE.—In carrying out this section, 20 the Secretary shall give due weight to the expert advice 21 of representatives of the entities described in section 22 102(b).

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1	SEC. 104. TECHNOLOGY RESEARCH AND DEVELOPMENT
2	PROGRAM.
3	(a) In General.—The Secretary shall carry out a
4	program of research on and development, demonstration,
5	and commercial application of coal-based technologies
6	under—
7	(1) this title;
8	(2) the Federal Nonnuclear Energy Research
9	and Development Act of 1974 (42 U.S.C. 5901 et
10	seq.);
11	(3) the Energy Reorganization Act of 1974 (42
12	U.S.C. 5801 et seq.); and
13	(4) title XIII of the Energy Policy Act of 1992
14	(42 U.S.C. 13331 et seq.).
15	(b) CONDITIONS.—The research, development, dem-
16	onstration, and commercial application program described
17	in subsection (a) shall be designed to achieve the cost and
18	performance goals.
19	SEC. 105. AUTHORIZATION OF APPROPRIATIONS.
20	(a) In General.—There are authorized to be appro-
21	priated to the Secretary to carry out sections 102, 103,
22	and 104, \$100,000,000 for each of the fiscal years 2002
23	through 2012, to remain available until expended.
24	(b) Conditions of Authorization.—The author-
25	ization of appropriations under subsection (a)—

1	(1) shall be in addition to authorizations of ap-
2	propriations in effect on the date of enactment of
3	this Act; and
4	(2) shall not be a cap on Department of Energy
5	fossil energy research and development and clean
6	coal technology appropriations.
7	SEC. 106. CLEAN COAL POWER COMMERCIAL APPLICA-
8	TIONS INITIATIVE.
9	(a) In General.—The Secretary shall establish a
10	clean coal power commercial applications initiative that
11	will demonstrate commercial applications of advanced
12	coal-based technologies applicable to new or existing power
13	plants, including coproduction plants.
14	(b) REQUIREMENTS.—The technologies to be dem-
15	onstrated under the initiative—
16	(1) shall be technologies that, by themselves or
17	in combination with other technologies, advance effi-
18	ciency, environmental performance, and cost com-
19	petitiveness well beyond that which is in operation or
20	has been demonstrated as of the date of enactment
21	of this Act; and
22	(2) may include technologies that have not pre-
23	viously been envisioned for commercial applications.
24	(c) Plan.—Not later than 120 days after the date
25	of enactment of this Act, the Secretary shall transmit to

- 1 Congress a plan to carry out subsection (a) that includes2 a description of—
- 3 (1) the program elements and management 4 structure to be used;
  - (2) the technical milestones to be achieved with respect to each of the advanced coal-based technologies included in the plan; and
  - (3) the demonstration activities proposed to be conducted at facilities that serve or are located at new or existing coal-based electric generation units having at least 50 megawatts nameplate rating, including improvements to allow the units to achieve 1 or more of the following:
    - (A) An overall design efficiency improvement of not less than 3 percent as compared with the efficiency of the unit as operated as of the date of enactment of this Act and before any retrofit, repowering, replacement, or installation.
    - (B) A significant improvement in, or new alternative technology to enhance, the environmental performance related to the control of sulfur dioxide, nitrogen oxide, or mercury in a manner that is different and well below the cost of technologies that are in operation or have

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- been demonstrated as of the date of enactment
  of this Act.
  - (C) A means of recycling or reusing a significant portion of coal combustion or gasification wastes or byproducts produced by coal-based generating units, excluding practices that are commercially available as of the date of enactment of this Act.
  - (D) A means to capture, separate, and reuse or dispose of carbon dioxide that is different and well below the cost of technologies that are in operation or have been demonstrated as of the date of enactment of this Act.

#### 15 SEC. 107. FINANCIAL ASSISTANCE.

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- 16 (a) IN GENERAL.—Not later than 180 days after the
- 17 date on which the Secretary transmits to Congress the
- 18 plan under section 106(c), the Secretary shall solicit pro-
- 19 posals for projects that serve or are located at new or ex-
- 20 isting facilities designed to achieve 1 or more of the levels
- 21 of performance set forth in section 106(c)(3).
- 22 (b) Project Criteria.—A solicitation under sub-
- 23 section (a) may include solicitation of a proposal for a
- 24 project to demonstrate—

1	(1) an overall design efficiency improvement of
2	not less than 3 percentage points as compared with
3	the efficiency of the unit as operated as of the date
4	of enactment of this Act and with no increase in the
5	potential to emit sulfur dioxide, nitrogen oxide, par-
6	ticulate matter, mercury, or carbon monoxide;
7	(2) a reduction of emissions to a level of not
8	more than—
9	(A)(i) in the case of sulfur dioxide—
10	(I) in the case of coal with a potential
11	combustion concentration sulfur emission
12	of 1.2 or more pounds per million British
13	thermal units of heat input, 5 percent of
14	the potential combustion concentration sul-
15	fur dioxide emissions; or
16	(II) in the case of a coal with a poten-
17	tial combustion concentration of less than
18	1.2 pounds per million British thermal
19	units of heat input, 15 percent of the po-
20	tential combustion concentration of sulfur
21	dioxide emissions;
22	(ii) in the case of nitrogen oxide—
23	(I) in the case of a boiler other than
24	a cyclone-fired boiler, emissions of 0.1

1	pound per million British thermal units of
2	heat; or
3	(II) in the case of a cyclone-fired boil-
4	er, 15 percent of the uncontrolled nitrogen
5	oxide emissions from the boiler; or
6	(iii) in the case of particulate matter, emis-
7	sions of 0.02 pound per million British thermal
8	units of heat input; or
9	(B) the emission levels for the pollutants
10	identified in subparagraph (A) that are speci-
11	fied in the new source performance standards of
12	the Clean Air Act (42 U.S.C. 7411) in effect at
13	the time of construction, installation, or retro-
14	fitting of the advanced coal-based technology
15	for the category of source if they are lower than
16	the levels specified in subparagraph (A); or
17	(3) the production of coal combustion byprod-
18	ucts that are capable of obtaining economic values
19	significantly greater than byproducts produced as of
20	the date of enactment of this Act with no increase
21	in the potential to emit sulfur dioxide, nitrogen
22	oxide, particulate matter, mercury, or carbon mon-
23	oxide.
24	(c) FINANCIAL ASSISTANCE.—The Secretary shall
25	provide financial assistance to projects that—

- 1 (1) demonstrate overall cost reductions in the 2 utilization of coal to generate useful forms of energy;
- (2) improve the competitiveness of coal among
  various forms of energy in order to maintain a diversity of fuel choices in the United States to meet electricity generation requirements;
  - (3) achieve, in a cost-effective manner, 1 or more of the criteria described in the solicitation; and
- 9 (4) demonstrate technologies that are applicable 10 to 25 percent of the electricity generating facilities 11 that use coal as the primary feedstock as of the date 12 of enactment of this Act.
- (d) Federal Share.—The Federal share of the cost
  of a project funded under this section shall not exceed 50
  percent.
- 16 (e) Funding.—To carry out this section, the Sec-17 retary may use any unobligated funds available to the Sec-18 retary and any funds obligated to any project selected 19 under the clean coal technology program that become un-20 obligated.

1	TITLE II—CREDIT FOR EMISSION
2	REDUCTIONS AND EFFI-
3	CIENCY IMPROVEMENTS IN
4	EXISTING COAL-BASED ELEC-
5	TRICITY GENERATION FACILI-
6	TIES
7	SEC. 201. CREDIT FOR INVESTMENT IN QUALIFYING CLEAN
8	COAL TECHNOLOGY.
9	(a) Allowance of Qualifying Clean Coal
10	TECHNOLOGY UNIT CREDIT.—Section 46 of the Internal
11	Revenue Code of 1986 (relating to amount of credit) is
12	amended by striking "and" at the end of paragraph (2),
13	by striking the period at the end of paragraph (3) and
14	inserting ", and", and by adding at the end the following:
15	"(4) the qualifying clean coal technology unit
16	credit.".
17	(b) Amount of Qualifying Clean Coal Tech-
18	NOLOGY UNIT CREDIT.—Subpart E of part IV of sub-
19	chapter A of chapter 1 of the Internal Revenue Code of
20	1986 (relating to rules for computing investment credit)
21	is amended by inserting after section 48 the following:
22	"SEC. 48A. QUALIFYING CLEAN COAL TECHNOLOGY UNIT
23	CREDIT.
24	"(a) In General.—For purposes of section 46, the
25	qualifying clean coal technology unit credit for any taxable

1	year is an amount equal to 10 percent of the qualified
2	investment in a qualifying system of continuous emission
3	control for such taxable year.
4	"(b) Qualifying System of Continuous Emis-
5	SION CONTROL.—
6	"(1) In general.—For purposes of subsection
7	(a), the term 'qualifying system of continuous emis-
8	sion control' means a system of the taxpayer
9	which—
10	"(A) serves, is added to, or retrofits an ex-
11	isting coal-based electricity generation unit, the
12	construction, installation, or retrofitting of
13	which is completed by the taxpayer (but only
14	with respect to that portion of the basis which
15	is properly attributable to such construction, in-
16	stallation, or retrofitting),
17	"(B) reduces the discharge into the atmos-
18	phere of 1 or more of the following pollutants
19	to not more than—
20	"(i) 5 percent of the potential com-
21	bustion concentration sulfur dioxide emis-
22	sions for a coal with a potential combus-
23	tion concentration sulfur emission of 1.2
24	lb/million btu of heat input or greater,

1	"(ii) 15 percent of the potential com-
2	bustion concentration sulfur dioxide emis-
3	sions for a coal with a potential combus-
4	tion concentration sulfur emission of less
5	than 1.2 lb/million btu of heat input,
6	"(iii) nitrogen oxide emissions of 0.1 lb
7	per million btu of heat input from other
8	than cyclone-fired boilers,
9	"(iv) 15 percent of the uncontrolled
10	nitrogen oxide emissions from cyclone-fired
11	boilers,
12	"(v) particulate emission of 0.02 lb
13	per million btu of heat input, and
14	"(vi) the emission levels specified in
15	the new source performance standards of
16	the Clean Air Act (42 U.S.C. 7411) in
17	force at the time of construction, installa-
18	tion or retrofitting of the qualifying system
19	of continuous emission control for the cat-
20	egory of source if such level is lower than
21	the levels specified in clause (i), (ii), (iii),
22	(iv), or (v),
23	"(C) is depreciable under section 167,
24	"(D) has a useful life of not less than 4
25	years, and

1	"(E) is located in the United States.
2	"(2) Special rule for sale-leasebacks.—
3	For purposes of subparagraph (A) of paragraph (1),
4	in the case of a unit which—
5	"(A) is originally placed in service by a
6	person, and
7	"(B) is sold and leased back by such per-
8	son, or is leased to such person, within 3
9	months after the date such unit was originally
10	placed in service, for a period of not less than
11	12 years,
12	such unit shall be treated as originally placed in
13	service not earlier than the date on which such prop-
14	erty is used under the leaseback (or lease) referred
15	to in subparagraph (B). The preceding sentence
16	shall not apply to any property if the lessee and les-
17	sor of such property make an election under this
18	sentence. Such an election, once made, may be re-
19	voked only with the consent of the Secretary.
20	"(c) Existing Coal-Based Electricity Genera-
21	TION UNIT.—For purposes of subsection (a), the term 'ex-
22	isting coal-based electricity generating unit' means, with
23	respect to any taxable year, a steam generator-turbine
24	unit which uses coal to produce 75 percent or more of

- 1 its output as electricity and was operated commercially be-
- 2 fore the effective date of this section.
- 3 "(d) Limit on Qualifying Clean Coal Tech-
- 4 NOLOGY UNIT CREDIT.—For purposes of subsection (a),
- 5 the credit shall be applicable to not more than the first
- 6 \$100,000,000 of qualifying investment in a qualifying sys-
- 7 tem of continuous emission control at any 1 existing coal-
- 8 based electricity generating unit.
- 9 "(e) Qualified Investment.—For purposes of sub-
- 10 section (a), the term 'qualified investment' means, with
- 11 respect to any taxable year, the basis of a qualifying sys-
- 12 tem of continuous emission control placed in service by
- 13 the taxpayer during such taxable year.
- 14 "(f) Qualified Progress Expenditures.—
- 15 "(1) Increase in qualified investment.—
- In the case of a taxpayer who has made an election
- under paragraph (5), the amount of the qualified in-
- vestment of such taxpayer for the taxable year (de-
- termined under subsection (e) without regard to this
- subsection) shall be increased by an amount equal to
- 21 the aggregate of each qualified progress expenditure
- for the taxable year with respect to progress expend-
- 23 iture property.
- 24 "(2) Progress expenditure property de-
- 25 FINED.—For purposes of this subsection, the term

1	'progress expenditure property' means any property
2	being constructed by or for the taxpayer and which
3	it is reasonable to believe will qualify as a qualifying
4	system of continuous emission control which is being
5	constructed by or for the taxpayer when it is placed
6	in service.
7	"(3) Qualified progress expenditures de-
8	FINED.—For purposes of this subsection—
9	"(A) Self-constructed property.—In
10	the case of any self-constructed property, the
11	term 'qualified progress expenditures' means
12	the amount which, for purposes of this subpart,
13	is properly chargeable (during such taxable
14	year) to capital account with respect to such
15	property.
16	"(B) Nonself-constructed prop-
17	ERTY.—In the case of nonself-constructed prop-
18	erty, the term 'qualified progress expenditures'
19	means the amount paid during the taxable year
20	to another person for the construction of such
21	property.
22	"(4) Other definitions.—For purposes of
23	this subsection—
24	"(A) Self-constructed property.—
25	The term 'self-constructed property' means

- property for which it is reasonable to believe that more than half of the construction expenditures will be made directly by the taxpayer.
  - "(B) Nonself-constructed property"

    means property which is not self-constructed property.
  - "(C) Construction, etc.—The term construction includes reconstruction and erection, and the term constructed includes reconstructed and erected.
  - "(D) ONLY CONSTRUCTION OF QUALI-FYING SYSTEM OF CONTINUOUS EMISSION CON-TROL TO BE TAKEN INTO ACCOUNT.—Construction shall be taken into account only if, for purposes of this subpart, expenditures therefor are properly chargeable to capital account with respect to the property.
  - "(5) ELECTION.—An election under this subsection may be made at such time and in such manner as the Secretary may by regulations prescribe. Such an election shall apply to the taxable year for which made and to all subsequent taxable years. Such an election, once made, may not be revoked except with the consent of the Secretary.

1	"(g) Coordination With Other Credits.—This
2	section shall not apply to any property with respect to
3	which the rehabilitation credit under section 47 or the en-
4	ergy credit under section 48 is allowed unless the taxpayer
5	elects to waive the application of such credit to such prop-
6	erty.
7	"(h) Termination.—This section shall not apply
8	with respect to any qualified investment made more than
9	10 years after the effective date of this section.".
10	(c) Recapture.—Section 50(a) of the Internal Rev-
11	enue Code of 1986 (relating to other special rules) is
12	amended by adding at the end the following:
13	"(6) Special rules relating to qualifying
14	SYSTEM OF CONTINUOUS EMISSION CONTROL.—For
15	purposes of applying this subsection in the case of
16	any credit allowable by reason of section 48A, the
17	following shall apply:
18	"(A) GENERAL RULE.—In lieu of the
19	amount of the increase in tax under paragraph
20	(1), the increase in tax shall be an amount
21	equal to the investment tax credit allowed under
22	section 38 for all prior taxable years with re-
23	spect to a qualifying system of continuous emis-
24	sion control (as defined by section $48A(b)(1)$ )
25	multiplied by a fraction whose numerator is the

number of years remaining to fully depreciate under this title the qualifying system of continuous emission control disposed of, and whose denominator is the total number of years over which such unit would otherwise have been subject to depreciation. For purposes of the preceding sentence, the year of disposition of the qualifying system of continuous emission control property shall be treated as a year of remaining depreciation.

"(B) PROPERTY CEASES TO QUALIFY FOR PROGRESS EXPENDITURES.—Rules similar to the rules of paragraph (2) shall apply in the case of qualified progress expenditures for a qualifying system of continuous emission control under section 48A, except that the amount of the increase in tax under subparagraph (A) of this paragraph shall be substituted in lieu of the amount described in such paragraph (2).

"(C) APPLICATION OF PARAGRAPH.—This paragraph shall be applied separately with respect to the credit allowed under section 38 regarding a qualifying system of continuous emission control.".

1	(d) Transitional Rule.—Section 39(d) of the In-
2	ternal Revenue Code of 1986 (relating to transitional
3	rules) is amended by adding at the end the following:
4	"(11) No carryback of section 48A credit
5	BEFORE EFFECTIVE DATE.—No portion of the un-
6	used business credit for any taxable year which is
7	attributable to the qualifying clean coal technology
8	unit credit determined under section 48A may be
9	carried back to a taxable year ending before the date
10	of enactment of section 48A.".
11	(e) Technical Amendments.—
12	(1) Section 49(a)(1)(C) of the Internal Revenue
13	Code of 1986 is amended by striking "and" at the
14	end of clause (ii), by striking the period at the end
15	of clause (iii) and inserting ", and", and by adding
16	at the end the following:
17	"(iv) the portion of the basis of any
18	qualifying system of continuous emission
19	control attributable to any qualified invest-
20	ment (as defined by section 48A(e)).".
21	(2) Section 50(a)(4) of such Code is amended
22	by striking "and (2)" and inserting ", (2), and (6)"
23	(3) Section 50(c) of such Code is amended by
24	adding at the end the following:

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1	"(6) Nonapplication.—Paragraphs (1) and
2	(2) shall not apply to any qualifying clean coal tech-
3	nology unit credit under section 48A.".
4	(4) The table of sections for subpart E of part
5	IV of subchapter A of chapter 1 of such Code is
6	amended by inserting after the item relating to sec-
7	tion 48 the following:
	"Sec. 48A. Qualifying clean coal technology unit credit.".
8	(f) Effective Date.—The amendments made by
9	this section shall apply to periods after December 31,
10	2001, under rules similar to the rules of section 48(m)
11	of the Internal Revenue Code of 1986 (as in effect on the
12	day before the date of enactment of the Revenue Reconcili-
13	ation Act of 1990).
14	SEC. 202. CREDIT FOR PRODUCTION FROM A QUALIFYING
15	CLEAN COAL TECHNOLOGY UNIT.
16	(a) Credit for Production From a Qualifying
17	CLEAN COAL TECHNOLOGY UNIT.—Subpart D of part IV
18	of subchapter A of chapter 1 of the Internal Revenue Code
19	of 1986 (relating to business related credits) is amended
20	by adding at the end the following:
21	"SEC. 45G. CREDIT FOR PRODUCTION FROM A QUALIFYING
22	CLEAN COAL TECHNOLOGY UNIT.
23	"(a) General Rule.—For purposes of section 38,

24 the qualifying clean coal technology production credit of

any taxpayer for any taxable year is equal to the product 2 of— 3 "(1) the applicable amount of clean coal tech-4 nology production credit, multiplied by 5 "(2) the kilowatt hours of electricity produced 6 by the taxpayer during such taxable year at a quali-7 fying clean coal technology unit during the 10-year 8 period beginning on the date the unit was returned 9 to service after retrofit, repowering, or replacement. 10 "(b) APPLICABLE AMOUNT.— "(1) IN GENERAL.—For purposes of this sec-11 12 tion, the applicable amount of clean coal technology 13 production credit is equal to \$0.0034. 14 "(2) Inflation adjustment factor.—For 15 calendar years after 2001, the applicable amount of 16 clean coal technology production credit shall be ad-17 justed by multiplying such amount by the inflation 18 adjustment factor for the calendar year in which the 19 amount is applied. If any amount as increased under 20 the preceding sentence is not a multiple of 0.01 cent, 21 such amount shall be rounded to the nearest mul-22 tiple of 0.01 cent. "(c) Definitions and Special Rules.—For pur-23

poses of this section—

1	"(1) Qualifying clean coal technology
2	UNIT.—The term 'qualifying clean coal technology
3	unit' means a unit of the taxpayer which—
4	"(A) is an existing coal-based electricity
5	generating steam generator-turbine unit,
6	"(B) has a nameplate capacity rating of
7	not more than 300,000 kilowatts, and
8	"(C) has been retrofitted, repowered, or re-
9	placed with a clean coal technology within 10
10	years after the effective date of this section.
11	"(2) CLEAN COAL TECHNOLOGY.—The term
12	'clean coal technology' means technology which—
13	"(A) uses coal to produce 50 percent or
14	more of its thermal output as electricity, includ-
15	ing advanced pulverized coal or atmospheric flu-
16	idized bed combustion, pressurized fluidized bed
17	combustion, integrated gasification combined
18	cycle, or any other technology for the produc-
19	tion of electricity,
20	"(B) has a design heat rate not less than
21	500 Btu/kWh below that of the existing unit be-
22	fore it is retrofit, repowered, or replaced with
23	the qualifying clean coal technology,
24	"(C) has a maximum design heat rate of
25	not more than 9.500 Btu/kWh when the design

1	coal has a heat content of more than 9,000 Btu
2	per pound,
3	"(D) has a maximum design heat rate of
4	not more than 10,500 Btu/kWh when the de-
5	sign coal has a heat content of 9,000 Btu per
6	pound or less, and
7	"(E) reduces the discharge into the atmos-
8	phere of 1 or more of the following pollutants
9	to not more than—
10	"(i) 5 percent of the potential com-
11	bustion concentration sulfur dioxide emis-
12	sions for a coal with a potential combus-
13	tion concentration sulfur emission of 1.2
14	lb/million btu of heat input or greater,
15	"(ii) 15 percent of the potential com-
16	bustion concentration sulfur dioxide emis-
17	sions for a coal with a potential combus-
18	tion concentration sulfur emission of less
19	than 1.2 lb/million btu of heat input,
20	"(iii) nitrogen oxide emissions of 0.1
21	lb per million btu of heat input from other
22	than cyclone-fired boilers,
23	"(iv) 15 percent of the uncontrolled
24	nitrogen oxide emissions from cyclone-fired
25	boilers,

1	"(v) particulate emissions of 0.02 lb
2	per million btu of heat input, and
3	"(vi) the emission levels specified in
4	the new source performance standards of
5	the Clean Air Act (42 U.S.C. 7411) in ef-
6	fect at the time of construction, installa-
7	tion or retrofitting of the qualifying clean
8	coal technology unit for the category of
9	source if such level is lower than the levels
10	specified in clause (i), (ii), (iii), (iv), or (v).
11	"(3) Application of Certain Rules.—The
12	rules of paragraphs (3), (4), and (5) of section 45
13	shall apply.
14	"(4) Inflation adjustment factor.—The
15	term 'inflation adjustment factor' means, with re-
16	spect to a calendar year, a fraction the numerator
17	of which is the GDP implicit price deflator for the
18	preceding calendar year and the denominator of
19	which is the GDP implicit price deflator for the cal-
20	endar year 2001.
21	"(5) GDP IMPLICIT PRICE DEFLATOR.—The
22	term 'GDP implicit price deflator' means the most
23	recent revision of the implicit price deflator for the
24	gross domestic product as computed by the Depart-

- 1 ment of Commerce before March 15 of the calendar
- 2 year.
- 3 "(d) Coordination With Other Credits.—This
- 4 section shall not apply to any property with respect to
- 5 which the qualifying clean coal technology unit credit
- 6 under section 48A is allowed unless the taxpayer elects
- 7 to waive the application of such credit to such property.".
- 8 (b) Credit Treated as Business Credit.—Sec-
- 9 tion 38(b) of the Internal Revenue Code of 1986 is amend-
- 10 ed by striking "plus" at the end of paragraph (14), by
- 11 striking the period at the end of paragraph (15) and in-
- 12 serting ", plus", and by adding at the end the following:
- "(16) the qualifying clean coal technology pro-
- duction credit determined under section 45G(a).".
- 15 (c) Transitional Rule.—Section 39(d) of the In-
- 16 ternal Revenue Code of 1986 (relating to transitional
- 17 rules), as amended by section 201(d), is amended by add-
- 18 ing at the end the following:
- 19 "(12) NO CARRYBACK OF SECTION 45G CREDIT
- 20 BEFORE EFFECTIVE DATE.—No portion of the un-
- 21 used business credit for any taxable year which is
- 22 attributable to the qualifying clean coal technology
- production credit determined under section 45G may
- be carried back to a taxable year ending before the
- date of enactment of section 45G.".

- 1 (d) CLERICAL AMENDMENT.—The table of sections
- 2 for subpart D of part IV of subchapter A of chapter 1
- 3 of the Internal Revenue Code of 1986 is amended by add-
- 4 ing at the end the following:
  - "Sec. 45G. Credit for production from a qualifying clean coal technology unit.".
- 5 (e) Effective Date.—The amendments made by
- 6 this section shall apply to production after the date of en-
- 7 actment of this Act.

### 8 TITLE III—INCENTIVES FOR

- 9 EARLY COMMERCIAL APPLI-
- 10 CATIONS OF ADVANCED
- 11 CLEAN COAL TECHNOLOGIES
- 12 SEC. 301. CREDIT FOR INVESTMENT IN QUALIFYING AD-
- 13 VANCED CLEAN COAL TECHNOLOGY.
- 14 (a) Allowance of Qualifying Advanced Clean
- 15 Coal Technology Facility Credit.—Section 46 of
- 16 the Internal Revenue Code of 1986 (relating to amount
- 17 of credit), as amended by section 201(a), is amended by
- 18 striking "and" at the end of paragraph (3), by striking
- 19 the period at the end of paragraph (4) and inserting ",
- 20 and", and by adding at the end the following:
- 21 "(5) the qualifying advanced clean coal tech-
- 22 nology facility credit.".
- 23 (b) Amount of Qualifying Advanced Clean
- 24 COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of
- 25 part IV of subchapter A of chapter 1 of the Internal Rev-

1	enue Code of 1986 (relating to rules for computing invest-
2	ment credit), as amended by section 201(b), is amended
3	by inserting after section 48A the following:
4	"SEC. 48B. QUALIFYING ADVANCED CLEAN COAL TECH
5	NOLOGY FACILITY CREDIT.
6	"(a) In General.—For purposes of section 46, the
7	qualifying advanced clean coal technology facility credit
8	for any taxable year is an amount equal to 10 percent
9	of the qualified investment in a qualifying advanced clean
10	coal technology facility for such taxable year.
11	"(b) Qualifying Advanced Clean Coal Tech-
12	NOLOGY FACILITY.—
13	"(1) In general.—For purposes of subsection
14	(a), the term 'qualifying advanced clean coal tech-
15	nology facility' means a facility of the taxpayer
16	which—
17	"(A)(i)(I) original use of which commences
18	with the taxpayer, or
19	"(II) is a retrofitted or repowered conven-
20	tional technology facility, the retrofitting or
21	repowering of which is completed by the tax-
22	payer (but only with respect to that portion of
23	the basis which is properly attributable to such
24	retrofitting or repowering), or

1	"(ii) is acquired through purchase (as de-
2	fined by section $179(d)(2)$ ,
3	"(B) is depreciable under section 167,
4	"(C) has a useful life of not less than 4
5	years,
6	"(D) is located in the United States, and
7	"(E) uses qualifying advanced clean coal
8	technology.
9	"(2) Special rule for sale-leasebacks.—
10	For purposes of subparagraph (A) of paragraph (1),
11	in the case of a facility which—
12	"(A) is originally placed in service by a
13	person, and
14	"(B) is sold and leased back by such per-
15	son, or is leased to such person, within 3
16	months after the date such facility was origi-
17	nally placed in service, for a period of not less
18	than 12 years,
19	such facility shall be treated as originally placed in
20	service not earlier than the date on which such prop-
21	erty is used under the leaseback (or lease) referred
22	to in subparagraph (B). The preceding sentence
23	shall not apply to any property if the lessee and les-
24	sor of such property make an election under this

1	sentence. Such an election, once made, may be re-
2	voked only with the consent of the Secretary.
3	"(c) Qualifying Advanced Clean Coal Tech-
4	NOLOGY.—For purposes of paragraph (1)—
5	"(1) In General.—The term 'qualifying ad-
6	vanced clean coal technology' means, with respect to
7	clean coal technology—
8	"(A) which has—
9	"(i) multiple applications, with a com-
10	bined capacity of not more than 5,000
11	megawatts (4,000 megawatts before 2009),
12	of advanced pulverized coal or atmospheric
13	fluidized bed combustion technology—
14	"(I) installed as a new, retrofit,
15	or repowering application,
16	"(II) operated between 2000 and
17	2012, and
18	"(III) having a design net heat
19	rate of not more than 9,500 Btu per
20	kilowatt hour when the design coal
21	has a heat content of more than 9,000
22	Btu per pound, or a design net heat
23	rate of not more than 9,900 Btu per
24	kilowatt hour when the design coal

1	has a heat content of 9,000 Btu per
2	pound or less,
3	"(ii) multiple applications, with a
4	combined capacity of not more than 1,000
5	megawatts (500 megawatts before 2009
6	and 750 megawatts before 2013), of pres-
7	surized fluidized bed combustion
8	technology—
9	"(I) installed as a new, retrofit,
10	or repowering application,
11	"(II) operated between 2000 and
12	2016, and
13	"(III) having a design net heat
14	rate of not more than 8,400 Btu per
15	kilowatt hour when the design coal
16	has a heat content of more than 9,000
17	Btu per pound, or a design net heat
18	rate of not more than 9,900 Btu's per
19	kilowatt hour when the design coal
20	has a heat content of 9,000 Btu per
21	pound or less, and
22	"(iii) multiple applications, with a
23	combined capacity of not more than 2,000
24	megawatts (1,000 megawatts before 2009
25	and 1,500 megawatts before 2013), of in-

1	tegrated gasification combined cycle tech-
2	nology, with or without fuel or chemical co-
3	production—
4	"(I) installed as a new, retrofit,
5	or repowering application,
6	"(II) operated between 2000 and
7	2016,
8	"(III) having a design net heat
9	rate of not more than 8,550 Btu per
10	kilowatt hour when the design coal
11	has a heat content of more than 9,000
12	Btu per pound, or a design net heat
13	rate of not more than 9,900 Btu per
14	kilowatt hour when the design coal
15	has a heat content of 9,000 Btu per
16	pound or less, and
17	"(IV) having a net thermal effi-
18	ciency on any fuel or chemical co-pro-
19	duction of not less than 39 percent
20	(higher heating value), or
21	"(iv) multiple applications, with a
22	combined capacity of not more than 2,000
23	megawatts (1,000 megawatts before 2009
24	and 1,500 megawatts before 2013) of tech-
25	nology for the production of electricity—

1	"(I) installed as a new, retrofit,
2	or repowering application,
3	"(II) operated between 2000 and
4	2016, and
5	"(III) having a carbon emission
6	rate which is not more than 85 per-
7	cent of conventional technology, and
8	"(B) which reduces the discharge into the
9	atmosphere of 1 or more of the following pollut-
10	ants to not more than—
11	"(i) 5 percent of the potential com-
12	bustion concentration sulfur dioxide emis-
13	sions for a coal with a potential combus-
14	tion concentration sulfur emission of 1.2
15	lb/million btu of heat input or greater,
16	"(ii) 15 percent of the potential com-
17	bustion concentration sulfur dioxide emis-
18	sions for a coal with a potential combus-
19	tion concentration sulfur emission of less
20	than 1.2 lb/million btu of heat input,
21	"(iii) nitrogen oxide emissions of 0.1
22	lb per million btu of heat input from other
23	than cyclone-fired boilers.

1	"(iv) 15 percent of the uncontrolled
2	nitrogen oxide emissions from cyclone-fired
3	boilers,
4	"(v) particulate emissions of 0.02 lb
5	per million btu of heat input, and
6	"(vi) the emission levels specified in
7	the new source performance standards of
8	the Clean Air Act (42 U.S.C. 7411) in ef-
9	fect at the time of retrofitting, repowering,
10	or replacement of the qualifying clean coal
11	technology unit for the category of source
12	if such level is lower than the levels speci-
13	fied in clause (i), (ii), (iii), (iv), or (v).
14	"(2) Exceptions.—Such term shall not in-
15	clude any projects receiving or scheduled to receive
16	funding under the Clean Coal Technology Program,
17	or the Power Plant Improvement administered by
18	the Secretary of the Department of Energy or a
19	Qualifying Clean Coal Technology Unit as defined in
20	section $45G(c)(1)$ .
21	"(d) CLEAN COAL TECHNOLOGY.—The term 'clean
22	coal technology means advanced technology which uses
23	coal to produce 75 percent or more of its thermal output
24	as electricity including advanced pulverized coal or atmos-
25	pheric fluidized bed combustion, pressurized fluidized bed

- 1 combustion, integrated gasification combined cycle with or
- 2 without fuel or chemical co-production, and any other
- 3 technology for the production of electricity which exceeds
- 4 the performance of conventional technology.
- 5 "(e) CONVENTIONAL TECHNOLOGY.—The term 'con-
- 6 ventional technology' means—
- 7 "(1) coal-fired combustion technology with a de-
- 8 sign net heat rate of not less than 9,500 Btu per kil-
- 9 owatt hour (HHV) and a carbon equivalents emis-
- sion rate of not more than 0.54 pounds of carbon
- per kilowatt hour when the design coal has a heat
- 12 content of more than 9,000 Btu per pound,
- "(2) coal-fired combustion technology with a de-
- sign net heat rate of not less than 10,500 Btu per
- kilowatt hour (HHV) and a carbon equivalents emis-
- sion rate of not more than 0.60 pounds of carbon
- 17 per kilowatt hour when the design coal has a heat
- 18 content of 9,000 Btu per pound or less, or
- 19 "(3) natural gas-fired combustion technology
- with a design net heat rate of not less than 7,500
- 21 Btu per kilowatt hour (HHV) and a carbon equiva-
- lents emission rate of not more than 0.24 pounds of
- carbon per kilowatt hour.
- 24 "(f) Design Net Heat Rate.—The design net heat
- 25 rate shall be based on the design annual heat input to

1	and the design annual net electrical output from the quali-
2	fying advanced clean coal technology (determined without
3	regard to such technology's co-generation of steam).
4	"(g) Selection Criteria.—Selection criteria for
5	qualifying advanced clean coal technology facilities—
6	"(1) shall be established by the Secretary of
7	Energy as part of a competitive solicitation,
8	"(2) shall include primary criteria of minimum
9	design net heat rate, maximum design thermal effi-
10	ciency, environmental performance, and lowest cost
11	to the government, and
12	"(3) shall include supplemental criteria as de-
13	termined appropriate by the Secretary of Energy.
14	"(h) Qualified Investment.—For purposes of
15	subsection (a), the term 'qualified investment' means, with
16	respect to any taxable year, the basis of a qualifying ad-
17	vanced clean coal technology facility placed in service by
18	the taxpayer during such taxable year.
19	"(i) Qualified Progress Expenditures.—
20	"(1) Increase in qualified investment.—
21	In the case of a taxpayer who has made an election
22	under paragraph (5), the amount of the qualified in-
23	vestment of such taxpayer for the taxable year (de-
24	termined under subsection (c) without regard to this

section) shall be increased by an amount equal to

the aggregate of each qualified progress expenditure for the taxable year with respect to progress expenditure property.

- "(2) Progress expenditure property De-Fined.—For purposes of this subsection, the term 'progress expenditure property' means any property being constructed by or for the taxpayer and which it is reasonable to believe will qualify as a qualifying advanced clean coal technology facility which is being constructed by or for the taxpayer when it is placed in service.
- "(3) QUALIFIED PROGRESS EXPENDITURES DE-FINED.—For purposes of this subsection—
  - "(A) Self-constructed property.—In the case of any self-constructed property, the term 'qualified progress expenditures' means the amount which, for purposes of this subpart, is properly chargeable (during such taxable year) to capital account with respect to such property.
  - "(B) Nonself-constructed property, the term 'qualified progress expenditures' means the amount paid during the taxable year

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1	to another person for the construction of such
2	property.
3	"(4) Other definitions.—For purposes of
4	this subsection—
5	"(A) Self-constructed property.—
6	The term 'self-constructed property' means
7	property for which it is reasonable to believe
8	that more than half of the construction expendi-
9	tures will be made directly by the taxpayer.
10	"(B) Nonself-constructed prop-
11	ERTY.—The term 'nonself-constructed property'
12	means property which is not self-constructed
13	property.
14	"(C) Construction, etc.—The term
15	'construction' includes reconstruction and erec-
16	tion, and the term 'constructed' includes recon-
17	structed and erected.
18	"(D) ONLY CONSTRUCTION OF QUALI-
19	FYING ADVANCED CLEAN COAL TECHNOLOGY
20	FACILITY TO BE TAKEN INTO ACCOUNT.—Con-
21	struction shall be taken into account only if, for
22	purposes of this subpart, expenditures therefor
23	are properly chargeable to capital account with
24	respect to the property.

- 1 "(5) Election.—An election under this sub-
- 2 section may be made at such time and in such man-
- 3 ner as the Secretary may by regulations prescribe.
- 4 Such an election shall apply to the taxable year for
- 5 which made and to all subsequent taxable years.
- 6 Such an election, once made, may not be revoked ex-
- 7 cept with the consent of the Secretary.
- 8 "(j) Coordination With Other Credits.—This
- 9 section shall not apply to any property with respect to
- 10 which the rehabilitation credit under section 47 or the en-
- 11 ergy credit under section 48 is allowed unless the taxpayer
- 12 elects to waive the application of such credit to such prop-
- 13 erty.
- 14 "(k) Termination.—This section shall not apply
- 15 with respect to any qualified investment made more than
- 16 10 years after the effective date of this section.".
- 17 (c) Recapture.—Section 50(a) of the Internal Rev-
- 18 enue Code of 1986 (relating to other special rules), as
- 19 amended by section 201(c), is amended by adding at the
- 20 end the following:
- 21 "(7) Special rules relating to qualifying
- 22 ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—
- For purposes of applying this subsection in the case
- of any credit allowable by reason of section 48B, the
- following shall apply:

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"(A) GENERAL RULE.—In lieu of the amount of the increase in tax under paragraph (1), the increase in tax shall be an amount equal to the investment tax credit allowed under section 38 for all prior taxable years with respect to a qualifying advanced clean coal technology facility (as defined by section 48B(b)(1)) multiplied by a fraction whose numerator is the number of years remaining to fully depreciate under this title the qualifying advanced clean coal technology facility disposed of, and whose denominator is the total number of years over which such facility would otherwise have been subject to depreciation. For purposes of the preceding sentence, the year of disposition of the qualifying advanced clean coal technology facility property shall be treated as a year of remaining depreciation.

"(B) Property ceases to qualify for Progress expenditures.—Rules similar to the rules of paragraph (2) shall apply in the case of qualified progress expenditures for a qualifying advanced clean coal technology facility under section 48B, except that the amount of the increase in tax under subparagraph (A)

of this paragraph shall be substituted in lieu of the amount described in such paragraph (2).

- "(C) APPLICATION OF PARAGRAPH.—This
  paragraph shall be applied separately with respect to the credit allowed under section 38 regarding a qualifying advanced clean coal technology facility.".
- 8 (d) Transitional Rule.—Section 39(d) of the In-9 ternal Revenue Code of 1986 (relating to transitional 10 rules), as amended by section 202(c), is amended by add-11 ing at the end the following:
  - "(13) NO CARRYBACK OF SECTION 48B CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the qualifying advanced clean coal technology facility credit determined under section 48B may be carried back to a taxable year ending before the date of enactment of section 48B.".

## 19 (e) Technical Amendments.—

(1) Section 49(a)(1)(C) of the Internal Revenue Code of 1986, as amended by section 201(e)(1), is amended by striking "and" at the end of clause (iii), by striking the period at the end of clause (iv) and inserting ", and", and by adding at the end the following:

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1	"(v) the portion of the basis of any
2	qualifying advanced clean coal technology
3	facility attributable to any qualified invest-
4	ment (as defined by section 48B(c)).".
5	(2) Section 50(a)(4) of such Code, as amended
6	by section 201(e)(2), is amended by striking "and
7	(6)" and inserting "(6), and (7)".
8	(3) Section 50(c)(6) of such Code, as added by
9	section 201(e)(3), is amended by inserting "or any
10	advanced clean coal technology facility credit under
11	section 48B" after "section 48A".
12	(4) The table of sections for subpart E of part
13	IV of subchapter A of chapter 1, as amended by sec-
14	tion 201(e)(4), is amended by inserting after the
15	item relating to section 48A the following:
	"Sec. 48B. Qualifying advanced clean coal technology facility credit.".
16	(f) Effective Date.—The amendments made by
17	this section shall apply to periods after December 31,
18	2001, under rules similar to the rules of section 48(m)
19	of the Internal Revenue Code of 1986 (as in effect on the
20	day before the date of enactment of the Revenue Reconcili-
21	ation Act of 1990).
22	SEC. 302. CREDIT FOR PRODUCTION FROM QUALIFYING
23	ADVANCED CLEAN COAL TECHNOLOGY.
24	(a) Credit for Production From Qualifying
25	ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of

1	part IV of subchapter A of chapter 1 of the Internal Rev-
2	enue Code of 1986 (relating to business related credits)
3	as amended by section 202(a), is amended by adding at
4	the end the following:
5	"SEC. 45H. CREDIT FOR PRODUCTION FROM QUALIFYING
6	ADVANCED CLEAN COAL TECHNOLOGY.
7	"(a) General Rule.—For purposes of section 38
8	the qualifying advanced clean coal technology production
9	credit of any taxpayer for any taxable year is equal to—
10	"(1) the applicable amount of advanced clean
11	coal technology production credit, multiplied by
12	"(2) the sum of—
13	"(A) the kilowatt hours of electricity, plus
14	"(B) each 3,413 Btu of fuels or chemicals
15	produced by the taxpayer during such taxable year
16	at a qualifying advanced clean coal technology facil-
17	ity during the 10-year period beginning on the date
18	the facility was originally placed in service.
19	"(b) APPLICABLE AMOUNT.—For purposes of this
20	section, the applicable amount of advanced clean coal tech-
21	nology production credit with respect to production from
22	a qualifying advanced clean coal technology facility shall
23	be determined as follows:
24	"(1) Where the design coal has a heat content
25	of more than 9.000 Btu per pound:

1	"(A)	In the	case o	of a	facility	originally
2	placed in se	ervice b	efore 20	009,	if—	

SINI - C. 'L' - L. ' D. A.W. /HIN' '-	The applicable amount is:		
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service	
Not more than 8,400	\$.0060 \$.0025 \$.0010	\$.0038 \$.0010 \$.0010.	

- 3 "(B) In the case of a facility originally 4 placed in service after 2008 and before 2013,
- 5 if—

(IIII - C. C. L. L. C. L. L. L. L. L. L. D. A.W. (IIIIV)	The applicable amount is:		
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service	
Not more than 7,770	\$.0105 \$.0085 \$.0075	\$.0090 \$.0068 \$.0055.	

- 6 "(C) In the case of a facility originally 7 placed in service after 2012 and before 2017,
- 8 if—

GDI - C 22 July - A Lord - A - Dr /LWI /HINY :	The applicable amount is:		
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service	
Not more than 7,380	\$.0140 \$.0120	\$.01 \$.0090.	

- 9 "(2) Where the design coal has a heat content 10 of not more than 9,000 Btu per pound:
- 11 "(A) In the case of a facility originally 12 placed in service before 2009, if—

Willia facility decision and heat mate Day (LWI) (HHIV) is	The applicable amount is:		
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service	
Not more than 8,500	\$.0060 \$.0025 \$.0010	\$.0038 \$.0010 \$.0010.	

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1	"(B) In the case of a facility originally
2	placed in service after 2008 and before 2013,
3	if—
	The applicable amount is:
	"The facility design net heat rate, Btu/kWh (HHV) is equal to:  For 1st 5 years of of such service such service  For 2d 5 years of such service
	Not more than 8,000       \$.009         More than 8,000 but not more than 8,250       \$.0085       \$.0068         More than 8,250 but not more than 8,400       \$.0075       \$.0055
4	"(C) In the case of a facility originally
5	placed in service after 2012 and before 2017,
6	if—
	"The facility design net heat rate, Btu/kWh (HHV) is  The applicable amount is:
	equal to:  For 1st 5 years  of such service  For 2d 5 years of such service
	Not more than 7,800       \$.0140       \$.0115         More than 7,800 but not more than 7,950       \$.0120       \$.0090
7 8	"(3) Where the clean coal technology facility is producing fuel or chemicals:
9	"(A) In the case of a facility originally
10	placed in service before 2009, if—
	"The facility design net thermal efficiency (HHV) is equal
	to: For 1st 5 years of of such service  For 2d 5 years of such service
	Not less than 40.6 percent       \$.0060       \$.0038         Less than 40.6 but not less than 40 percent       \$.0025       \$.0010         Less than 40 but not less than 39 percent       \$.0010       \$.0010.
11	"(B) In the case of a facility originally
12	placed in service after 2008 and before 2013,
13	if—

"The facility design not thermal efficiency (HHV) is equal	The applicable amount is:	
"The facility design net thermal efficiency (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent	\$.0105	\$.009

Willia facility deciment the small off signer (HHW) is small	The applicable amount is:	
"The facility design net thermal efficiency (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
Less than 43.9 but not less than 42 percent Less than 42 but not less than 40.9 percent	\$.0085 \$.0075	\$.0068 \$.0055.

1 "(C) In the case of a facility originally 2 placed in service after 2012 and before 2017, 3 if—

Willia facility design and thousand officiency (HHW) is sound	The applicable amount is:	
"The facility design net thermal efficiency (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent	\$.0140 \$.0120	\$.0115 \$.0090.

- 4 "(c) Inflation Adjustment Factor.—For cal-
- 5 endar years after 2001, each amount in paragraphs (1),
- 6 (2), and (3) shall be adjusted by multiplying such amount
- 7 by the inflation adjustment factor for the calendar year
- 8 in which the amount is applied. If any amount as in-
- 9 creased under the preceding sentence is not a multiple of
- 10 0.01 cent, such amount shall be rounded to the nearest
- 11 multiple of 0.01 cent.
- 12 "(d) Definitions and Special Rules.—For pur-
- 13 poses of this section—
- 14 "(1) IN GENERAL.—Any term used in this sec-
- tion which is also used in section 48B shall have the
- meaning given such term in section 48B.
- 17 "(2) APPLICABLE RULES.—The rules of para-
- graphs (3), (4), and (5) of section 45 shall apply.

- 1 "(3) Inflation adjustment factor' means, with re-2 term 'inflation adjustment factor' means, with re-3 spect to a calendar year, a fraction the numerator 4 of which is the GDP implicit price deflator for the 5 preceding calendar year and the denominator of 6 which is the GDP implicit price deflator for the cal-7 endar year 2001.
- "(4) GDP IMPLICIT PRICE DEFLATOR.—The term 'GDP implicit price deflator' means the most recent revision of the implicit price deflator for the gross domestic product as computed by the Department of Commerce before March 15 of the calendar year.".
- 14 (b) Credit Treated as Business Credit.—Sec-
- 15 tion 38(b) of the Internal Revenue Code of 1986, as
- 16 amended by section 202(b), is amended by striking "plus"
- 17 at the end of paragraph (15), by striking the period at
- 18 the end of paragraph (16) and inserting ", plus", and by
- 19 adding at the end the following:
- 20 "(17) the qualifying advanced clean coal tech-
- 21 nology production credit determined under section
- 22 45H(a).".
- 23 (c) Transitional Rule.—Section 39(d) of the In-
- 24 ternal Revenue Code of 1986 (relating to transitional

- 1 rules), as amended by section 301(d), is amended by add-
- 2 ing at the end the following:
- 3 "(14) No carryback of section 45H credit
- 4 BEFORE EFFECTIVE DATE.—No portion of the un-
- 5 used business credit for any taxable year which is
- 6 attributable to the qualifying advanced clean coal
- 7 technology production credit determined under sec-
- 8 tion 45H may be carried back to a taxable year end-
- 9 ing before the date of enactment of section 45H.".
- 10 (d) CLERICAL AMENDMENT.—The table of sections
- 11 for subpart D of part IV of subchapter A of chapter 1
- 12 of the Internal Revenue Code of 1986, as amended by sec-
- 13 tion 202(d), is amended by adding at the end the fol-
- 14 lowing:
  - "Sec. 45H. Credit for production from qualifying advanced clean coal technology.".
- (e) Effective Date.—The amendments made by
- 16 this section shall apply to production after the date of en-
- 17 actment of this Act.
- 18 SEC. 303. RISK POOL FOR QUALIFYING ADVANCED CLEAN
- 19 COAL TECHNOLOGY.
- 20 (a) Establishment.—The Secretary of the Treas-
- 21 ury shall establish a financial risk pool which shall be
- 22 available to any United States owner of a qualifying ad-
- 23 vanced clean coal technology which has qualified for an
- 24 advanced clean coal technology production credit (as de-

1	fined in section 45H of the Internal Revenue Code of
2	1986, as added by section 302) to offset for the first 3
3	years of the operation of such technology the costs (not
4	to exceed 5 percent of the total cost of installation) for
5	modifications resulting from the technology's failure to
6	achieve its design performance.
7	(b) AUTHORIZATION OF APPROPRIATIONS.—There is
8	authorized to be appropriated such sums as are necessary
9	to carry out the purposes of this section.
10	TITLE IV—TREATMENT OF CER-
11	TAIN GOVERNMENTAL AND
12	OTHER ENTITIES
13	SEC. 401. CREDITS FOR CERTAIN ORGANIZATIONS AND
14	GOVERNMENTAL UNITS.
15	Section 6401(b) of the Internal Revenue Code of
16	1986 (relating to excessive credits) is amended by adding
17	at the end the following:
18	"(3) Credits for certain organizations
19	AND GOVERNMENTAL UNITS.—
20	"(A) ALLOWANCE OF CREDITS.—Any cred-
21	it which would be allowable under section 45G,
22	45H, 48A, or 48B with respect to a facility of
23	an entity whether or not such entity is exempt
24	from tax, shall be treated as a credit allowable
	,

1	chapter 1 of subtitle A to such entity if such
2	entity is—
3	"(i) an organization described in sec-
4	tion $501(c)(12)(C)$ and exempt from tax
5	under section 501(a),
6	"(ii) an organization described in sec-
7	tion $1381(a)(2)(C)$ ,
8	"(iii) a public utility (as defined in
9	section $136(e)(2)(B)$ ,
10	"(iv) a State, the District of Colum-
11	bia, or a possession of the United States,
12	or any political subdivision thereof, or
13	"(v) the Tennessee Valley Authority.
14	"(B) Use of credit.—
15	"(i) Transfer of credit.—An enti-
16	ty described in clause (i), (ii), (iii), or (iv)
17	of subparagraph (A) may assign, trade,
18	sell, or otherwise transfer any credit allow-
19	able to such entity under subparagraph
20	(A) to any other person or entity.
21	"(ii) Use of credit as an off-
22	SET.—Notwithstanding any other provision
23	of law, in the case of any entity described
24	in clause (i) or (ii) of subparagraph (A),
25	any credit allowable to such entity under

1 subparagraph (A) may be applied by such 2 entity, without penalty, as a prepayment of 3 any loan, debt or other obligation the enti-4 ty has made, incurred or guaranteed under the Rural Electrification Act of 1936 (7 6 U.S.C. 901 et seq.). 7 "(iii) Use by TVA.— 8 "(I) IN GENERAL.—Notwith-9 standing any other provision of law, in 10 the case of an entity described in sub-11 paragraph (A)(v), any credit allowable 12 under subparagraph (A) to such enti-13 ty may be applied as a credit against 14 the payments required to be made in 15 any fiscal year under section 15d(e) of 16 the Tennessee Valley Authority Act of 17 1933 (16 U.S.C. 83ln-4(e)) as an an-18 nual return on the appropriations in-19 vestment and an annual repayment 20 sum. "(II) 21 TREATMENT  $\mathbf{OF}$ CRED-22 ITS.—The aggregate amount of cred-23 its described in subparagraph (A)

shall be treated in the same manner

and to the same extent as if such

24

1	credits were a payment in cash and
2	shall be applied first against the an-
3	nual return on the appropriations in-
4	vestment.
5	"(III) Credit carryover.—
6	With respect to any fiscal year, if the
7	aggregate amount of the credits de-
8	scribed in subparagraph (A) exceeds
9	the aggregate amount of payment ob-
10	ligations described in subclause (I),
11	the excess amount shall remain avail-
12	able for application as credits against
13	the amounts of such payment obliga-
14	tions in succeeding fiscal years in the
15	same manner as described in this
16	clause.
17	"(C) Credit not income.—Neither a
18	transfer under clause (i) nor a use under clause
19	(ii) of subparagraph (B) of any credit allowable
20	under subparagraph (A) shall result in income
21	for purposes of section 501(c)(12).
22	"(D) Transfer proceeds treated as
23	ARISING FROM ESSENTIAL GOVERNMENT FUNC-
24	TION.—Any proceeds derived by an entity de-
25	scribed in clause (iii) or (iv) of subparagraph

1	(A) from the transfer of any such credit under
2	subparagraph (B)(I) shall be treated as arising
3	from an essential government function.
4	"(E) TREATMENT OF UNRELATED PER-
5	sons.—For purposes of this title, sales among
5	and between entities described in clauses (i),
7	(ii), (iii), and (iv) of subparagraph (A) shall be

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treated as sales between unrelated parties.".